

spot punctured with brown; mesosternum brown. Legs brownish orange, mottled with black; tibiæ with an indistinct orange ring in the middle; tarsi reddish, with the basal joint, the apex of the third joint, and the tips of the claws, black. Elytra; coriaceous portion brownish testaceous, rather thickly and finely punctured and mottled with brown; membrane brownish, semi-transparent, closely reticulated with brown nervures. Margins of the abdomen fulvous, punctured and spotted with black. Abdomen beneath brownish fulvous, very flat, with a distinct, smooth central furrow, the sides covered with small, black, somewhat confluent spots.

This species is rendered very remarkable by the form of its scutellum, of which the base is elevated into a large rounded tubercle, and the apex slightly emarginate, and bituberculate. The membrane of the elytra is also much more closely reticulated with brown nervures than in any other described species of *Dinidor*.

V. *Apparatus for destroying Mould on Insects, by the Vapour of Spirits of Wine.* Invented by M. VICTOR GHILIANI, Employé au Museum Royal de Turin. Communicated by JOHN CURTIS, Esq., F.L.S.

[Read 1st March, 1852.]

ONE of the most important objects, after amassing a collection of insects, is to secure its preservation; and one of the most essential requisites is a substantially-built and dry house. I need not enumerate the difficulties in tropical countries to secure preserved specimens of natural history from destruction; and even in North America the conditions of the climate, in some parts, are so peculiar, that at certain periods it seems next to an impossibility to preserve such objects from the effects of damp. In England there are three enemies to contend with—1st, *insects*, such as the larvæ of *Tineæ*, *Anobia*, *Anthreni*, *Acari*, and an *Atropos*; 2ndly, *grease* exuding from dead specimens; and lastly, *mouldiness*.

With any degree of care, none of the insect enemies are to be feared, excepting the *Atropos*; and in glazed drawers or air-tight boxes, with a constant supply of camphor, the contents are secure from these active little pests. Thanks to the experiments of Lepidopterists, a remedy is found against the greasing of insects,

either by embowelling the larger moths, especially the males, or saturating them with pure spirits of turpentine or camphine, and then covering them with pipe-clay or magnesia.* The last plague is *mouldiness*; and I believe, as houses and villas are now built around the metropolis, with walls one brick thick, often on a clay soil, as well as in damp and wooded districts, this disease is not to be avoided. In the various houses I have inhabited in the west end of London, and even at St. John's-Wood, my collections never suffered from mould; but when I resided at Hayes, in Middlesex, on a tenacious soil, I found my collections, after four years, suffering so extensively from mould, that I determined on returning to town; and, by regular attention, I observe it is fast disappearing.

As this is so important a subject to many of our scientific friends residing in the country, I made it one of my objects, in visiting the museums on the continent, to learn the best means of restoring a mouldy collection to a clean and healthy state; and I am happy in being able to communicate a mode, safe, cheap and expeditious. Instead of washing the specimens individually with alcohol, or submitting them to the vapour of bruised laurel leaves—by the process I wish to submit to the Society, forty drawers may be cured in a morning, without removing a single specimen, at the expense of half a pint of alcohol.

My friend M. Ghiliani gave me permission to make known this admirable plan, and was so obliging as to put it in practice, that I might be convinced of its efficacy, and, at the same time, entirely comprehend the process. It was a box of large mouldy beetles, &c., which was subjected to the operation, and in three minutes every specimen was freed from mould.

The apparatus consisted of a stool, a pan and a lamp, which I will now describe. (Pl. II.) The stool (fig. A.) must have a flat top (1), larger than the drawers or boxes infected, say two feet square (C). A circular hole (2) is cut in the centre, large enough to admit a tapering pan (B). Round this aperture is a square frame attached (3), about two inches broad, and one and a-half inch deep; upon two sides of this a little spline (4) is fixed, about half-an-inch square. The pan (B) should be of block-tin, four and a-half inches deep in the clear, three or three and a-half inches broad at the top, with a rim (5) three-quarters of an inch broad, having the two edges slightly raised. A small hand-lamp (6), with oil and a cotton-wick, is necessary, and three or four pieces of wood, like bungs (7).

* All these remedies have been described in the *Zoologist* and other periodicals.

When required, fill the pan (B), (not more than half-full of spirits of wine (see the dotted line 8), otherwise it might boil over,) and drop it into the aperture (2); then light the lamp, and place it upon as many of the blocks as will raise it sufficiently for the flame to heat the spirit. As soon as it boils, take the drawer of insects, reverse it, and place it upon the frame, over the pan, from which the vapour is arising, keeping it close down for one, two or three minutes, according to the size of the insects, when the mould will have vanished: then hold the drawer before a brisk fire, or place it in the sun for a short time, and the operation is terminated. Where many drawers are to be cleansed, as soon as one is taken off the stool to be dried, another may be placed over the bath, and thus a dozen may be done in half-an-hour. Great care must be taken not to let the spirits boil over, which is scarcely possible if the pan be only half-filled; and the raised edges of the rim not only strengthen the pan, but prevent any spirits from running over. If a lid be placed over the pan, it will very soon boil, when of course it must be removed.

There is another advantage by this process. All mites and destructive larvæ of insects are instantly annihilated, without the slightest injury to the collection.

Dr. Chavannes, of Lausanne, tells me he purifies his collections, when infested by destructive insects, by admitting into his boxes sulphuretted hydrogen, but that is an operation which it would not be safe to entrust to any persons who are not accustomed to chemical experiments.

EXPLANATION OF THE PLATE. (Pl. II.)

Fig. A. A 4-legged stool drawn in perspective.

1. The top.
2. A circular hole.
3. A raised square frame.
4. A spline or bead to confine the drawer and keep it in its place during the operation.*
6. A lamp.
7. Three small blocks of wood.

B. The pan of block-tin.

5. The rim, with raised edges.
8. Level of the alcohol.

C. Diagram to show nearly the relative proportions of the top of the stool; the figures according with those employed in Fig. A.

* When smaller drawers or boxes are to be purified, a smaller frame may be placed inside of fig. 3 for them to rest upon, so that no vapour may escape; and as this is a sketch of M. Ghiliani's first idea, many other improvements may suggest themselves to those who employ the apparatus.